

CLAIMS

What is claimed is:

1. An instrument panel for use in a vehicle having a passenger side airbag module, the instrument panel comprising:
 - a first outer layer having a show surface and an inner surface;
 - 5 an intermediary layer disposed on said inner surface;
 - an inner layer disposed on said intermediary layer after it is disposed on said inner surface;
 - a plurality of cuts in said show surface, said plurality of cuts defining a deployable door in the instrument panel,
 - 10 wherein said plurality of cuts in said show surface are not visually perceivable and do not extend completely through said first outer layer.
2. The instrument panel as in claim 1, wherein said inner layer is configured to have a plurality of scores positioned in a similar arrangement as
15 said plurality of cuts.
3. The instrument panel as in claim 2, wherein said plurality of scores are arranged in the shape of a "U".
- 20 4. The instrument panel as in claim 1, wherein inner layer is formed from a thermoplastic material and said intermediary layer is formed of a polyurethane foam and said first outer layer is formed of a polyurethane material.
5. The instrument panel as in claim 1, wherein said plurality of cuts are formed in a non-linear manner.

6. The instrument panel as in claim 1, wherein said plurality of cuts are angularly offset from an axis that is normal to said show surface.

7. An instrument panel for use in a vehicle having a passenger side airbag module and a windshield, the instrument panel comprising:

a first outer layer having a show surface and an inner surface;

an intermediary layer disposed on said inner surface;

an inner layer disposed on said intermediary layer after it is disposed on said inner surface;

a plurality of cuts in said show surface, said plurality of cuts defining a deployable door in the instrument panel and do not extend completely through said first outer layer,

wherein said plurality of cuts in said show surface are not visually perceivable and said plurality of scores are angularly offset from an axis that is normal to said show surface, said plurality of scores being configured to traverse angularly towards the windshield.

8. The instrument panel as in claim 7, wherein said inner layer is configured to have a plurality of scores positioned in a similar arrangement as said plurality of cuts.

9. The instrument panel as in claim 7, wherein said plurality of cuts are arranged in the shape of a "U".

10. The instrument panel as in claim 7, wherein inner layer is formed from a thermoplastic material and said intermediary layer is formed of a polyurethane foam and said first outer layer is formed of a polyurethane material.

11. The instrument panel as in claim 7, wherein said plurality of cuts are formed in a non-linear manner and said show surface is configured to

have a textured surface.

12. A method of forming a hidden, integral passenger air bag door in an instrument panel, the method comprising:

providing a first outer layer having a show surface and an inner surface;

cutting a deployment door opening in said first outer layer by introducing a cutting device to said show surface;

disposing an intermediary layer on said inner surface of said first outer layer;

disposing an inner layer on said intermediary layer after it is disposed on said inner surface;

wherein said plurality of cuts in said show surface are not visually perceivable and do not extend completely through said first outer layer.

13. The method as in claim 12, wherein the cutting device causes said plurality of cuts in said show surface to be cut at an angular configuration with respect to an axis of said first outer layer, said axis being normal to said show surface.

14. The method as in claim 13, wherein said plurality of cuts are configured to angularly traverse towards a forward end of the vehicle when the instrument panel is installed in the vehicle.

15. A method of forming a hidden, integral passenger air bag door in an instrument panel, the method comprising:

providing a first outer layer having a show surface and an inner surface;

disposing a portion of said first outer layer onto a mold having a feature, wherein a portion of said first outer layer is curved about said feature and

said feature has a radius of curvature less than a radius of curvature of said portion of said first outer layer when said first outer layer is arranged into its installation configuration;

cutting a deployment door opening in said portion of said first outer layer by introducing a cutting device to said show surface;

disposing an intermediary layer on said inner surface of said first outer layer after said deployment door opening is cut therein;

disposing an inner layer on said intermediary layer after it is disposed on said inner surface;

wherein said plurality of cuts in said show surface are not visually perceivable and do not extend completely through said first outer layer.

16. The instrument panel as in claim 15, wherein said inner layer is configured to have a plurality of scores positioned in a similar arrangement as said plurality of cuts.

17. The instrument panel as in claim 16, wherein said plurality of scores travel into a portion of said intermediary layer.

18. The instrument panel as in claim 17, wherein said plurality of scores are arranged in the shape of a "U".

19. The instrument panel as in claim 15, wherein said inner layer is formed from a thermoplastic material and said intermediary layer is formed of a polyurethane foam and said first outer layer is formed of a polyurethane material.

20. The instrument panel as in claim 19, wherein said plurality of scores are formed in a non-linear manner and said show surface is configured to have a textured surface.